



Rapid HIV Testing at Federally Qualified Health Care Centers in New Jersey

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ABSTRACT

Purpose: The Centers for Disease Control and Prevention recommends integration of HIV testing into routine patient care services. The New Jersey Department of Health and Senior Services (NJDHSS) funds HIV counseling and rapid testing at two federally qualified health care centers: Henry J. Austin Health Care Center in Trenton and the Plainfield Community Health center in Plainfield.

Methods: Staff at both sites received counseling training, rapid testing training, completed competency testing and passed proficiency testing prior to offering rapid HIV testing. Both sites were licensed by NJDHSS. Data was collected using the standard Centers for Disease Control and Prevention counseling and testing form.

Results: Henry J. Austin Health Center started rapid testing on May 21, 2004 and the Plainfield Community Health Center started on June 1, 2004. Through September 28, 2004, 654 tests have been done. Six of the 654 (1%) patients tested positive. All 654 (100%) patients received posttest counseling and test results. One patient had a preliminary positive rapid test and a negative Western blot.

Conclusions: Rapid testing provides a way to integrate HIV counseling and testing into routine care. All the patients learned their test results compared with a statewide average of 65% of patients when non-rapid HIV testing is done. Advantages of rapid testing in a clinical setting include same day results, immediate entrance into treatment, and more patients knowing their HIV status.

INTRODUCTION

- New Jersey is a high prevalence state for HIV disease:
 - 5th in the US in cumulative reported AIDS cases,
 - 3rd in cumulative reported pediatric AIDS cases, and
 - 1st in the proportion of women with AIDS among its cumulative reported AIDS cases.¹
- The major focus of HIV prevention and control has been to promote the acceptance of risk reducing behaviors through prevention counseling and testing and to facilitate linkage to medical, prevention and other supports services.²
- The percentage of adults in the United States who obtain an HIV test has remained 10 – 12% per year for more than a decade.³
- Antibody testing to diagnose HIV was introduced in 1985.⁴ The standard laboratory testing protocol for HIV requires obtaining a specimen and sending it to a licensed laboratory for testing. The patient needs to return for a second visit to receive test.
- The Centers for Disease Control and Prevention currently recommends that all providers integrate HIV counseling and testing into routine practice.²
- Rapid testing offers the advantage of point-of-care testing with results available in 20 to 40 minutes.
- People do not need to return to obtain their test results.
- More people learn their HIV status, and if infected can be referred for treatment, prevention programs, and social services much more rapidly.
- Only 65% of persons receiving non-rapid HIV testing in New Jersey receive posttest counseling and their HIV test result.
- People who know they are infected with HIV are more likely to practice risk-reduction, especially if a brief behavioral intervention is conducted at the patient visit.²

- Five rapid HIV tests have been approved by the United States Food and Drug Administration (FDA) for commercial use:
 - Single Use Diagnostic System for HIV-1 (SUDS, Abbott Laboratories, Abbott Park, IL—no longer marketed),
 - OraQuick HIV1 and the Oraquick Advance HIV-1/HIV-2 (Orasure Technologies, Bethlehem, PA),
 - Reveal™ (MedMira Laboratories, Halifax, Nova Scotia),
 - Unigold Recombigen (Trinity Biotech PLC (Wicklow, Ireland), and
 - Multispot HIV-1/HIV-2 (Bio-Rad Laboratories, Hercules, CA).

- Rapid diagnostic HIV testing has several clinical applications. These include
 - assisting in diagnosis and counseling of patients with HIV disease,
 - reducing vertical HIV transmission for women who present in labor with unknown HIV status, and
 - reducing the risk of occupational and nonoccupational transmission of HIV.^{2,6}

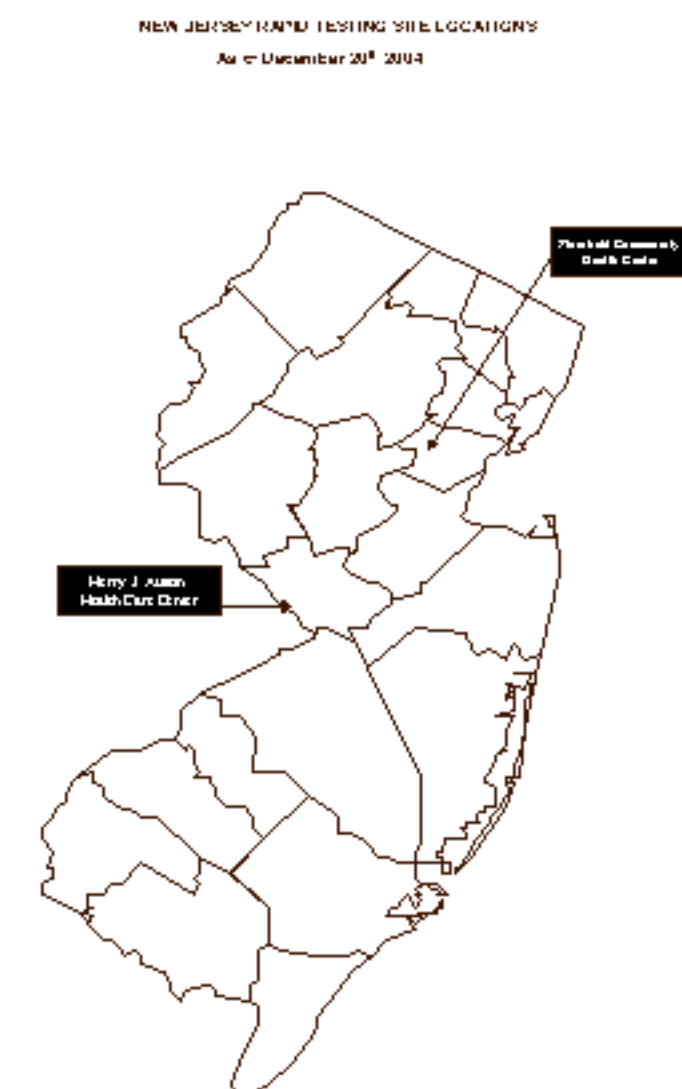
- This poster describes the implementation and effectiveness of point-of-care rapid testing at publicly funded counseling and testing sites located at two Federally Qualified Health Care Centers (FQHC's) in New Jersey.

METHODS

- Oraquick was selected as the point-of-care rapid test for use at publicly funded counseling and testing sites located at FQHC's in New Jersey.
- In early 2004, Oraquick was the only FDA approved, CLIA-waived point-of-care rapid test in the United States.
- Two FQHC's, Henry J. Austin Health Care Center in Trenton and the Plainfield Community Health Center in Plainfield, received New Jersey Department of Health and Senior Services (NJDHSS) funding to conduct rapid HIV testing.
- Counselors at both FQHC's completed a full day training session on counseling for the rapid test, including proper completion of the local fields in the CDC counseling and testing form.
- Because neither FQHC had a licensed laboratory on site, a laboratory director was provided by NJDHSS.
- A rapid testing QA plan was developed, policies and procedure were developed, and New Jersey laboratory licenses obtained prior to implementation of rapid testing at each site.
- All persons performing the testing had a full day training on the testing procedure, QA plan, policies, and reducing the risk of occupational blood-borne pathogen transmission.
- All persons conducting testing passed competency and proficiency testing.
- All preliminary positive rapid tests were confirmed with a Western blot performed by the NJDHSS laboratory.
- Each site submitted completed CDC counseling and testing forms to NJDHSS.
- The forms were scanned into the counseling and testing database.
- Data analysis was done using SAS (version 8.02, SAS Institute, Cary, NC) and Microsoft Access (version 2000, Microsoft Corporation, Redmond, WA).

RESULTS

- The first FQHC to offer rapid testing in New Jersey was the Henry J. Austin Health Care Center in Trenton. Rapid testing started on May 21, 2004.
- Rapid testing started at the Plainfield Community Health Center on June 1, 2004.
- The geographic location of the two FQHC's is shown in Figure 1



- Through December 9, 2004, 1,171 rapid tests had been conducted.
 - All 1,171 (100%) persons tested received posttest counseling and results.
 - 1,158 (98.9%) tested HIV negative.
 - 11 (0.9%) had a preliminary positive and a confirmed positive result.
 - 10 of the 11 infected persons (90.9%) were newly identified positives.
 - 2 (0.2%) had a preliminary positive rapid test and a negative Western blot, representing discordant lab results.

Table 1. Demographic Results

	OVERALL	%	NEGATIVE	POSITIVE	DISCORDANT
GENDER					
Male	402	34	396	6	0
Female	769	64	762	5	2
Total	1,171		1,158	11	2
AGE					
13 – 19	128	11	128	0	0
20 – 29	505	43	500	4	1
30 – 39	279	24	275	3	1
40 – 49	174	15	171	3	0
> 50	85	7	84	1	0
Total	1,171		1,158	11	2
RACE					
White	181	15	181	0	0
Black	539	46	532	7	0
Hispanic	404	35	399	3	2
AS/PI	14	1	14	0	0
Am.Ind/A	3	0	3	0	0
Other	28	2	27	1	0
Undetermined	2	0	2	0	0
Total	1,171		1,158	11	2

CONCLUSIONS

- As seen in Table 1, the majority of persons tested were minorities. Approximately 2/3 of the persons tested were female.
- Table 1 also shows that the highest proportion of persons testing positive are:
 - male (6 of 402, 1.5%),
 - black (7 of 539, 1.3%),
 - 40-49 years of age (3 of 174, 1.7%).
- Rapid HIV testing has been successfully implemented at publicly funded counseling and testing sites at FQHC's in New Jersey.
- The percentage of persons receiving posttest counseling and test results increased from 65% prior to rapid testing to 100% with rapid testing.
- Integration of rapid testing in daily practice allows prompt diagnosis of patients with HIV disease. These patients can then be referred to a provider with experience and expertise treating HIV patients. In addition, these patients can be referred for prevention and social services.
- The infected persons identified by rapid testing reflect the HIV epidemic in New Jersey in that the majority of those identified were black, male.
- Rapid testing identified previously undiagnosed persons.
- It is important to note that over 90% of the people who tested positive at these FQHC's were previously undiagnosed.
- A minimal proportion of persons tested had a false positive rapid test.
- Based on the success of rapid testing at FQHC's thus far, NJDHSS plans to expand rapid testing to include more satellite sites of these FQHC's, and if possible, to provide rapid testing at more FQHC's.

REFERENCES

- Centers for Disease Control and Prevention. HIV/AIDS Surveillance Report 2002. <http://www.cdc.gov/hiv/stats/addendum.htm>
- Centers for Disease Control and Prevention. Incorporating HIV Prevention into the Medical Care of Persons Living with HIV: Recommendations of CDC, the Health Resources and Services Administration, the National Institutes of Health, and the HIV Medicine Association of the Infectious Diseases Society of America. MMWR 2003 July 18; 52(RR12):1-24.
- Centers for Disease Control and Prevention. Number of Persons Tested for HIV – United States, 2002. MMWR 2004 December 3; 53:1110-1113.
- Truong, H-H M and Klausenr JD. Diagnostic Assays for HIV-1 infection. MLO 2004;36 no. 7: 12-20.
- Paul S, Grimes-Dennis J, Burr C, and DiFerdinando GT. Rapid Diagnsotic Testing for HIV: Clinical Implications. 2003(Supplement);100:11-14.
- Centers for Disease Control and Prevention. Antiretroviral Postexposure Prophylaxis After Sexual, Injection-Drug Use, or Other Nonoccupational Exposure to HIV in the United States: Recommendations from the U.S. Department of Health and Human Services. MMWR 2005;54(RR02):1-20.